Committee on Resources
Full Committee

Witness Statement

PRESENTATION IN SUPPORT OF

CONSERVATION AND REINVESTMENT ACT OF 1999

(H.R. 701)

AND

PERMANENT PROTECTION FOR AMERICA'S RESOURCES 2000 ACT

(H.R. 798)

by

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>Legislative Field Hearing

Louisiana State Supreme Court

New Orleans, Louisiana

May 3, 1999

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(PLAQUEMINES PARISH: PLATFORM FOR OCS ACTIVITIES)

Introduction

Plaquemines Parish is the southernmost parish in Louisiana. It extends southeastward for 90 miles from New Orleans into the deeper waters of the Gulf of Mexico and is bisected by the Mississippi River. The southern two-thirds of the parish is a peninsula surrounded by waters of the Gulf of Mexico. The parish is a product of the Mississippi River, having been created through sediment deposition during two episodes of delta building: the St. Bernard delta beginning around 4500 years ago and the Modern Plaquemines delta which began around 950 years ago. Natural levees comprise about eight percent of the parish, while drained swamp and marshland adjacent to the these uplands cover another six percent of the parish (U. S. Dept. of Agri.-Natural Resource Conservation Service 1999) for a total area of approximately 60,000 acres (van Beek et al. 1986.) Barrier beaches and spoil disposal areas at South Pass and Southwest Pass comprise approximately six percent of the parish. The vast majority of the parish (over 80 percent) consists of low-lying wetlands (van Beek et al. 1986).

Between 1956 and 1990, approximately 194,400 acres (304 square miles) of Plaquemines Parish disappeared at an average rate of 5,717 acres per year (8.9 square miles per year) (National Wetlands Resources Center 1999). This land loss is the result of a combination of numerous natural and man-made factors including: leveeing of the Mississippi River, a decrease in sediment being carried by the river, subsidence, sea level rise, construction of pipeline canals and rig access canals, dredging of navigation channels, saltwater intrusion into freshwater habitats, extraction of water and hydrocarbons, wave erosion, and faulting.

Plaquemines Parish has been a staging platform and support base for Outer Continental Shelf (OCS) mineral exploration and production since the 1950s. Land use activities and facilities directly related to OCS activities include: ports, shipyards, supply/service bases, refineries, pipe coating/storage yards, gas processing plants, heliports, deep-draft channels, and pipeline corridors. To support these facilities and operations and provide for the population involved in OCS activities, the parish has provided numerous facilities, infrastructure, and services including: roads, utilities, waste disposal sites, hospitals and emergency response services, police and fire protection, education and recreational opportunities, potable and industrial water supplies, drainage and flood protection. The parish has expended considerable funds to support expansion of the OCS industry and to sustain the industry in times of cyclic downturns. To continue to sustain support for the OCS industry; to maintain the land, infrastructure, and services needed for this industry; and to restore environmental damages associated with past and future OCS-related activities requires a greater expenditure of funds than the parish can provide.

OCS Related Impacts to Plaquemines Parish

The Port of Venice is geographically positioned to strategically stage operations to the U. S. Department of the Interior, Minerals Management Service's (MMS) Central and Eastern Planning Areas of the OCS. Approximately 100 companies conduct OCS mineral related operations from the Port of Venice, other ports, and dock facilities located within the parish (Plaquemines Port Authority 1999). Four refineries that process oil, gas, and sulfur extracted from the OCS are located in the parish. Plaquemines Parish also provides landfall for over 40 OCS pipelines from the gulf and linear corridors for numerous OCS product pipelines that pass through the parish transporting hydrocarbons to storage areas and processing/refining plants in other parts of the state and the United States (Wicker et al. 1986). At least 20 interstate pipeline companies have pipeline facilities in the parish.

The operation of OCS related facilities and activities in Plaquemines Parish has had numerous impacts on the natural and human environment. For example, wetlands have been lost or degraded through both primary and secondary impacts associated with installation and maintenance of OCS pipelines, booster stations, and metering stations; processing, storage and staging facilities; and associated development. Canals constructed for OCS pipelines and navigation remove wetlands directly at the time of construction and secondarily through boat wake and wind generated erosion of canal banks. Incidental oil spills and release of non-hazardous oilfield waste can degrade or destroy wetlands and submerged aquatic habitats, including oyster reefs. Water quality can be degraded through point source discharges from processing, storage, and staging facilities; oil spills; release of non-hazardous oilfield waste; and through illegal discharges from marine vessels. Loss of wetlands flanking the natural levees and developed sites also contributes to the degradation of water quality because the vegetation is no longer present to filter potential pollutants running off of upland and developed sites.

The human environment of Plaquemines Parish, as related to infrastructure, services, socio-economics, and general way of life, also has experienced impacts from OCS activities and facilities. For example, highways have had to be upgraded and require more frequent maintenance as a result of the heavy truck traffic and generally higher traffic volumes associated with deliveries of OCS related materials and supplies. The higher traffic volumes have resulted in traffic congestion and public safety concerns with which the parish must contend. Sustaining the nationally strategic OCS related development and support bases in Plaquemines Parish requires that considerable funds be expended on equipment, materials, and personnel to maintain extensive flood protection levees and drainage districts along both sides of the Mississippi River. Support of direct and indirect OCS related facilities and businesses has placed high demand on the parish for potable water, public utilities, solid waste disposal sites, and non-hazardous oilfield waste disposal sites.

Increases in local and transient populations associated with OCS activities have required the parish to provide additional services in the areas of emergency response, police, schools, education, recreational areas and activities, hospitals, general medical treatment and social services. Furthermore, the parish has had to maintain a high level of emergency response readiness to evacuate large numbers of OCS personnel, equipment, and vehicles via the protected Mississippi River corridor prior to hurricane and tropical storm landfalls. During cyclic downturns in the OCS economy, the parish must still maintain existing services and infrastructure as well as provide needed social services.

Future OCS Activities in the Gulf of Mexico

While the oilfield industry is marked with cyclical economic ups and downs, the stage is set for a new era of oil and gas exploration and development in the Gulf of Mexico, much of which will be staged out of Plaquemines Parish. A strong economy, technological advancements, multiple deepwater discoveries, passage of the Deep Water Royalty Relief Act (DRRA) (Public Law 104-58, Title III), and the availability through the MMS's active leasing program of new and viable prospects have resulted in the revival of mineral exploration and development in the Gulf of Mexico (Cranswick and Regg 1997). Innovative deepwater drilling and development technologies provide the means to operate in water depths that are not economically viable for conventional platforms used in shallower OCS waters (Cranswick and Regg 1997). In addition, advanced geophysical exploration technologies are rekindling interests in developing existing, shallow water prospects by providing a means of finding "new" mineral reserves in previously surveyed areas. For instance, 3-D seismic surveys are presently being conducted on speculation with data compiled and marketed to potential buyers (Louton, per. comm. 1997). Another advancement, the development of 4-D seismic technology, provides a means of overlaying existing 2-D and 3-D seismic data for estimating the depletion of reservoirs (Quilio, per. comm. 1997).

The number of active mineral leases in the Gulf of Mexico increased from approximately 5,000 in 1995, to 6,177 in January, 1997; and were projected to exceed 8,300 in 1998, a 40 percent increase (Cranswick and Regg 1997). The MMS conducted two record-breaking lease sales in 1997 that consisted of a total of 1,800 tracts at a price of $1.5 billion (Gresham 1997). Lease Sale 169, attracted $784,120,709 in high bids in 1998 (MMS 1998). In March of 1999, the seventh lease conducted under DRRA guidelines, Lease Sale 172, resulted in high bids from 67 companies totaling $171,804,696 (MMS 1999a). In addition, the MMS announced the notice of intent to prepare an Environmental Impact Statement regarding Eastern Gulf Sale 181 that will be tentatively bid in December, 2001 (MMS 1999c).

By April 19, 1999, there were 2,984 active leases in waters exceeding 1,000 feet in depth in the Gulf of Mexico, 1,408 approved applications to drill, but only 22 producing platforms (MMS 1999b and Melancon and Baud 1999). Mr. Peter J. Robertson, President of Chevron U.S.A. Production, described the keen industry interests in deepwater gulf exploration (*The Advocate* 1997):

The Gulf of Mexico's (deepwater) is now considered one of the world's great frontiers and is luring companies from around the globe. Not only has technology reduced the cost of getting at these deep reserves, but the reservoirs themselves look much better than we imagined.

Accordingly, Chevron's number of deepwater leases increased from 16 in 1990 to 362 by November, 1997 (*The Advocate* 1997). Mr. Robertson states that deepwater development and production will increase 42 percent to 1.7 billion barrels over the next ten years (*The Advocate* 1997). By the year 2003, deepwater wells will account for 55 to 63 percent of the daily oil production and 24 to 29 percent of the daily gas production in the entire gulf (Melancon and Baud 1999).

The Gulf of Mexico's Outer Continental Shelf (OCS) production from leases granted by the MMS should increase from 945 Million Barrels Oil/Day (MBOD) in 1995 to a range from 1,537 to 1,910 MBOD by the end of the year 2,001 (Melancon and Baud 1999). During this six-year period, the potential exists for an increase in production of over 100 percent. In its report, *Global Offshore Oil Prospects to 2000*, the International Energy Agency, Paris, France, projects that offshore production activity "will not only be sustained, but will accelerate through the year 2000" (*Offshore* 1997).

According to Louisiana State University economist, Dr. Loren C. Scott, the Gulf of Mexico will remain active for one primary reason - the oil companies' low cost of producing oil (Gresham 1997). For instance, Shell Oil's deepwater Auger platform produced oil at a cost of $13.35 per barrel in 1994. Ursa, Shell's latest deepwater platform, is projected to cost $6.80 per barrel at the end of 1999 (Gresham 1997). Ocean Energy's cost savings are similar with costs of $10.36 per barrel in 1994, dropping to $7.10 per barrel in 1997 (Gresham 1997). Economic predictions of oil costs dropping from the current $20 per barrel to $16 and $17 per barrel will still allow the operators to remain profitable (Gresham 1997).

The MMS has a preliminary impression that unlike the last oil and gas boom, much of the activity will be more centralized (Louton, per. comm. 1997). Deepwater operators will not use a port if they cannot get loaded and turned around quickly (Louton, per. comm. 1997). Servicing deepwater operations is more demanding (e.g., deeper draft requirements, heavier cargoes, larger crane requirements, etc.) and service companies are tending to locate in concentrated areas of activity (Louton, per. comm. 1997).

The deepwater prospects have spawned a new generation of offshore service boats, requiring deeper drafts and the capability to carry heavier loads for further distances (Louton, per. comm. 1997). These vessels

require deepwater port facilities (Louton, per. comm. 1997). According to Mr. Joe Agular of Johnson Rice & Co., New Orleans, there is a clear shortage of rigs and boats for the gulf's deepwater. He explains, "(t)his has been pushed along even further by continued increases in (offshore) leasing activity. Big Oil and major independents (alike) are making commitments to the deepwater markets"(Hall 1997).

The MMS presently has no definition for the term 'deepwater port' (Louton, per. comm. 1997), but defines 'deepwater prospects' as mineral development areas where water depths exceed 1,000 feet (Cranswick and Regg 1997). The MMS is planning to determine which ports can be utilized by the large supply boats that presently are being constructed at shipyards throughout south Louisiana to supply deepwater prospects (Louton, per. comm. 1997). These vessels may require port channel depths exceeding 20 feet (Louton, per. comm. 1997). Water depth and hull draft will not be the only criteria in determining if a port can be classified as deepwater (Louton, per. comm. 1997). Port facilities must have the capability to (absorb intermodal deliveries and) efficiently load the boats (Louton, per. comm. 1997).

Due to the overlapping of goods and services needed for deepwater and shallow shelf exploration and production activities and the number of companies involved in both, the MMS has had difficulty clearly discerning and differentiating the two in ongoing studies (Louton, per. comm. 1997).

The interest to drill new wells is not limited to deepwater leases (Louton, per. comm. 1997). Tremendous advances have also been made in exploration and production in shallow continental shelf areas as a result of advances in 3-D seismic and new and safer horizontal and multiple drilling technologies (Louton, per. comm. 1997). Three-dimensional seismic technology is renewing interests in fields long thought "played out" (Louton, per. comm. 1997). The 3-D surveys are also providing geologists with improved data for finding new discoveries in fault lenses which in the past were too difficult to drill (Louton, per. comm. 1997). According to Ivanovich (1997):

For years, producers' efforts to find oil and gas beneath the numerous salt formations that litter the gulf seabed were thwarted because the structures distorted the seismic data. Three-dimensional seismic and graphic imaging techniques developed in the last few years are allowing producers to locate shallow prospects missed by earlier technology.

Discoveries and projections of new oil and gas reserves in the Gulf of Mexico continue. For instance, the maritime boundary agreement between the U. S. and Mexico reached in 1978, and ratified by the U.S. Senate in 1997, has resulted in additional available deepwater prospects. Drilling in the 10,000-foot water depths of two areas, known as the "Gaps" or "Doughnut Holes", located along the new international boundary in the middle of the gulf was considered unthinkable twenty years ago, but technological advances since that time have placed potentially large mineral reserves within reach (*The Advocate* 1997b).

Utilization of Proposed OCS Funding

Plaquemines Parish will be challenged to combat environmental and socio-economic impacts from OCS activities, meet financial obligations associated with onshore OCS activities, and protect the parish's landmass on which OCS activities and facilities are located. The potential funding available as a result of passage of one or both of the proposed bills (e.g., *Conservation and Reinvestment Act of 1999* and *Permanent Protection for America's Resources 2000 Act*) is crucial to the Parish's ability to achieve these goals. Under the *Conservation and Reinvestment Act of 1999*, funds would be allocated as follows: Title I - coastal restoration, Title II - land acquisition and recreation, and Title III - wildlife conservation and education, including wetland habitat restoration and acquisition. In Louisiana, Title I funds could also be

allocated for mitigating onshore impacts of OCS activities, such as infrastructure and public services.

Louisiana's recently released report *Coast 2050: Toward a Sustainable Coastal Louisiana* (Louisiana Coastal Wetlands Conservation and Restoration Task Force and Wetlands Conservation and Restoration Authority 1998), identified a number of regional ecosystem strategies for conserving and restoring wetlands in coastal Louisiana. Within Plaquemines Parish these strategies include:

Use existing locks to divert Mississippi River water at Empire

Manage outfall of existing diversions at Naomi and West Pointe-a-la Hache

Continue building and maintaining delta splays along the Mississippi River

Construct more effective small diversions east and west of Empire

Construct sediment trap in the Mississippi River south of Venice and double handle dredged material to create new marsh in the Birdsfoot Delta

Construct a delta-building diversions in the

Myrtle Grove/Naomi area

Bastion Bay area

Benny's Bay area between Main Pass and Baptiste Collette Bayou

American Bay area

Quarantine Bay area

Prevent loss of bedload off the Continental Shelf by relocating the Mississippi River Navigation Channel south of Venice

Construct wave absorbers at the heads of bays such as the Lake Washington/Grand Ecaille area and upper Breton Sound Basin

Construct reef zones across bays to enhance estuarine fisheries habitat

Extend and maintain barrier shoreline from Sandy Point to Southwest Pass

The availability of OCS funds would facilitate implementation of the already identified wetland conservation and restoration strategies sooner, thus, directly and immediately benefiting Plaquemines Parish. In addition, funding could be used to address economic issues related to natural resource harvesting, especially oyster growing and leased areas, that would be impacted by the delta-building and freshwater diversion strategies for creating or conserving wetlands.

Funding directed toward restoration and maintenance of wetlands and water quality would benefit and enhance the propagation and sustainability of marine organisms including finfish, shellfish, and microorganisms in the estuarine food web. Economic activities related to the harvesting of renewable

resources (i.e., commercial fisheries and trapping) would also be enhanced and perpetuated. This funding also would sustain water-based recreational opportunities (i.e., sports fishing, crabbing, boating, and sightseeing) and expand new business and educational opportunities related to eco-tourism.

Infrastructure and public services in the form of modern, safe roads, docking/transfer facilities, levees, pump stations, siphons, utilities, water treatment/handling facilities, water lines, heliports sites, and emergency communications/response systems are essential for supporting OCS activities staged from Plaquemines Parish. Funding from Title I of the proposed *Conservation and Reinvestment Act of 1999* would be directed at providing such infrastructure and associated public services.

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